

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
4RF Limited Request for Waiver of	)	WT Docket No. 13-188
Part 90 Emissions	)	

To: Chief, Wireless Telecommunications Bureau

**REPLY COMMENTS OF 4RF LIMITED**

4RF Limited (“4RF”), by its undersigned counsel, hereby submits Reply Comments urging the Commission to act expeditiously on its request for waiver of Section 90.207(i) to authorize spectrally efficient G1D and D1D modulations for Part 90 telemetry equipment.<sup>1</sup>

No party has filed comments in this proceeding to oppose 4RF’s Waiver Request. In fact, the only Commenter that filed in response to the Commission’s Public Notice was James E. Whedbee, who recommended in his comments that the Commission grant 4RF’s Waiver Request.

Mr. Whedbee states that use of phase modulation is “for all intents and purposes one and the same” as frequency modulation and that authorization of phase modulation is an academic point.<sup>2</sup> 4RF agrees and notes that it has requested, as an alternative to waiver, a clarification stating that under the current rules G1D emissions are permissible where F1D emissions are authorized.

4RF also agrees with Mr. Whedbee that authorization for D1D emissions will enable users to migrate to new spectrum efficient technology fully consistent with FCC policies encouraging more intensive use of Part 90 spectrum.<sup>3</sup>

---

<sup>1</sup> Letter dated July 18, 2013 from Greg Kunkle, counsel for 4RF Limited, to Ruth Milkman, Chief, Wireless Telecommunications Bureau (“Waiver Request”).

<sup>2</sup> See Comments of James E. Whedbee at 1.

<sup>3</sup> *Id.* at 2.

Grant of the requested relief will promote the public interest and provide an important tool for critical infrastructure companies seeking to meet requirements for higher data speed transmissions in the VHF and UHF bands. As stated in the Waiver Request, 4RF's request for relief pertains to modulation only and 4RF is not requesting any other deviation from the Commission's rules. As evidenced by the small number of comments submitted, 4RF believes that its requested relief is uncontroversial and a common sense update to the modulations currently permitted for telemetry devices under section 90.207(i).

4RF strongly urges the Commission to act on its Request for Waiver consistent with these Reply Comments.

Respectfully submitted,

**4RF LIMITED**

By: /s/  
Gregory E. Kunkle  
Keller and Heckman LLP  
1001 G St., N.W.  
Suite 500 West  
Washington, DC 20001  
(202) 434-4100  
Its Attorney

September 12, 2013